

REMARKS

All of the claims considered by the Examiner (i.e., claims 18-28) were rejected on the basis of US patent No. 6,625,160 to Suzuki standing alone or in combination with a secondary reference. In particular, the outstanding office relies primarily on Figure 5 of the Suzuki reference. The pending rejections are respectfully traversed.

Claim 18 is directed at a node **having first and second buffers which each have an associated crossbar**. Incoming packets (e.g. data segments) are presorted into the appropriate buffers **before** entering the crossbar switch. Each buffer uses a distinct crossbar switch, which as described in the specification, has the advantage of improved efficiency. Claim 23 is a method claim directed at a method of routing a received data packet through a node using a similar approach. The outstanding rejection takes the position that such a structure is illustrated in Figure 5 of Suzuki. This assertion is respectfully traversed.

Figure 5 of Suzuki shows a conventional crossbar switch arrangement 136, which has a number of lookup table mappers 506-510 that feed internal queues 516-526. It is important to understand that each input line (e.g. 163) is arranged to feed a single associated lookup table mapper (e.g., 506). The lookup table mappers (e.g., 506) are each arranged to map each received data packet to its appropriate output line. Thus, it should be appreciated that the "crossbar" functionality of cross bar switch 136 is effectively performed by the lookup tables (e.g. 506). The lookup table mappers each have a dedicated queue (e.g. 516, 518) for each and every output line (e.g. 174, 176). See, col. 9, lines 5-8. Therefore, the queues 516-526 in Suzuki do not pass packets to associated crossbar switches as required by claim 18 and 23. Accordingly, it is respectfully submitted that pending claims 18, 20-23, 25 and 27-28 are in no way anticipated by Fig. 5 of Suzuki and that the pending rejection of these claims should be withdrawn for at least this reason.

It is noted that the outstanding office action appears to have taken the position that schedulers 528/530 constitute the claimed crossbars. The characterization is respectfully traversed. The schedulers 528/530 are just that, schedulers. That is, they simply schedule packets for a single associated output line that have already been sorted and are waiting in the queues 516-526. As would be appreciated by those skilled in the art, a crossbar is conceptually a unit that acts as an M by N switch where any input (M) can be routed to any output (N). [Although as pointed out in the specification, the crossbar may be designed so that an input cannot feed itself]. The schedulers 528/530 do not perform such a switching functionality.

Rather, each scheduler (e.g. scheduler 528) simply receives inputs from a number of sources (e.g., queues 516, 520 and 524) and schedules those inputs for a single output line (e.g. 174).

In view of the foregoing, it is respectfully submitted that nothing in Figure 5 of the Suzuki reference discloses or reasonably suggests an arrangement wherein node having first and second buffers which receive packets (or data segments) based on information contained in a packet (or data segment) and which each have an associated crossbar. Accordingly, it is respectfully submitted that the outstanding rejections of claims 18, 20-23, 25, 27 and 28 as being anticipated by Suzuki should be withdrawn for at least this reason.

Dependent claims 19, 24 and 26 were rejected on the basis of Suzuki in combination with Kessler. However, Kessler does not overcome the deficiencies of the Suzuki reference with the respect to the independent claims and therefore it is respectfully submitted that these dependent claims are patentable for at least the reason set forth above.

Additionally, all of the various dependent claims 19-22 and 24-28 each depend either directly or indirectly from one of independent claims 18 or 23. These dependent claims require other elements that when considered in the context of the claimed invention, further patentably distinguish the art of record.

New claims 31-34 have been added. These new claims are respectfully submitted to be fully supported by the specification as originally filed and patentable over the art of record for much the same reasons as set forth above.

In view of the foregoing, it is respectfully submitted that the pending objections and rejections should be withdrawn. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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